

# TBTD/TBTDD

## TILT & TURN BALCONY/TERRACE DOOR



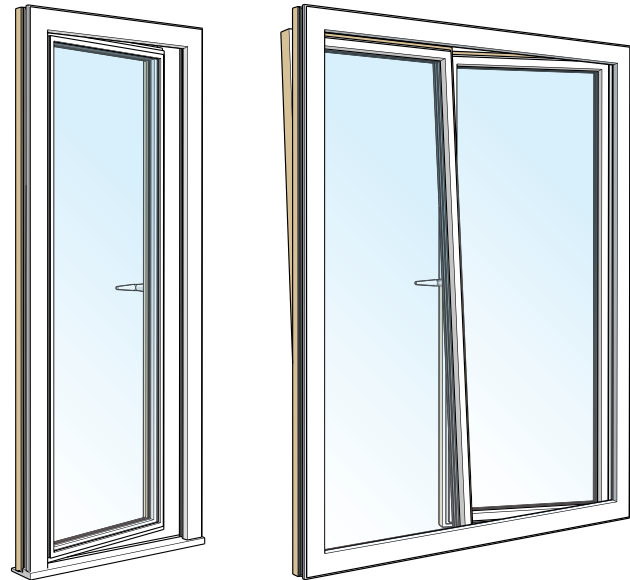
### APPLICATION

For residential access and ventilation purposes at ground floor terrace or upper floor level balcony locations where doors are to be secured from within the building.

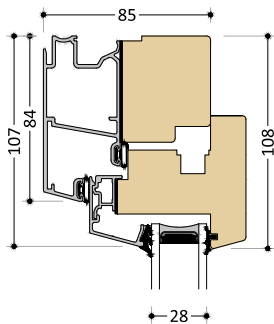
### FUNCTION

Tilt and turn single leaf doors (TBTD) are secured by a concealed multipoint locking espagnolette bolt mechanism via a single key locking handle to engage either the bottom hung function (ventilation position) or when unlocked the side hung open in mode.

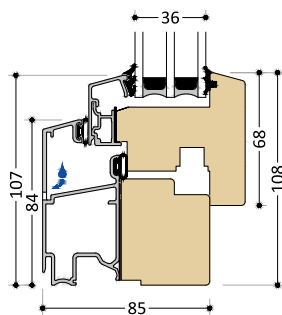
In the case of pairs of doors (TBTDD) the slave leaf has a side hung open in operation only and is secured by espagnolette activated flush bolts.



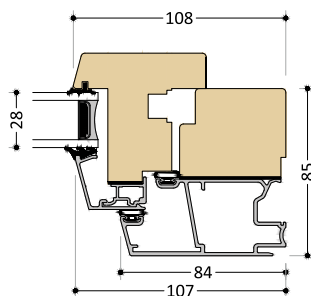
### HEAD



### CILL



### JAMB



### IRONMONGERY

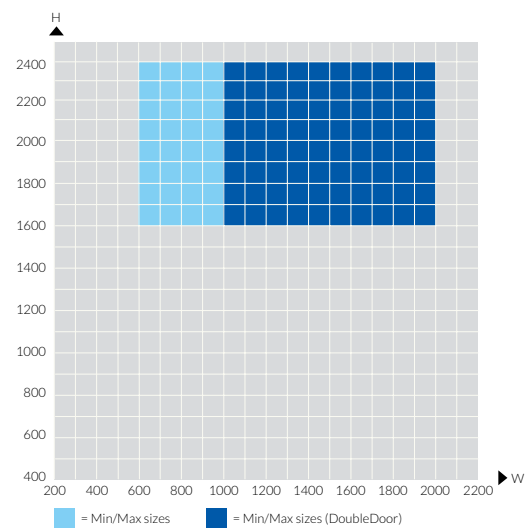
**Hinges:** Adjustable bolt hinges.

**Espagnolette:** Concealed multipoint locking roller bolts.

**Handle:** Satin anodised finish key locking TBT espagnolette handle internally.

**Slave Leaf:** Espagnolette activated flush bolts with constant friction stay.

A wide range of optional ironmongery items are available, please contact us for further information.



Note: Size limits also depend on the weight of the glazing. For further information please contact our Technical Department.  
Clear opening = frame width less 187mm (single leaf).

# THE SYSTEM STANDARDS

## CONSTRUCTION

Composite construction combining extruded aluminium alloy profiles to EN AW 6060-T6 and close grained, laminated North European Redwood, durability Class 3 as defined in BS EN 350. Other timber species can be specified.

Timber frame and casement sections are precision machined and assembled with pinned and glued comb joints. Mullions and transoms are assembled with mortice and tenon joints.

External aluminium frame profiles are assembled with sealed mitred joints by means of crimped angle cleats, bonded with PIB tape and mechanically fixed with stainless steel pins to internal timber members.

Windows are fully weatherstripped with EPDM or silicone slot seals.

## MANUFACTURE

All windows and doors are purpose made to specification in accordance with BS 644 : 2009 and EN 14351-1 : 2006.

## APPEARANCE

Aluminium profiles are chemically pre-treated and powder coated in any standard RAL colour in accordance with BS 6496 : 1984. Standard gloss level 75% +/- 5%. Other gloss levels can be specified.

Timber is fully factory finished with a two or three coat spray applied water based clear lacquer gloss level 35%, paint to NCS/ RAL specification gloss level 40% or a wide range of standard stain finishes gloss level 35%.

## GLASS AND GLAZING

Windows and doors are factory double or triple glazed to specification in accordance with BS 6262 : 1982 with 28mm, 36mm or 48mm dual sealed units constructed to EN 1279-2 : 2002 and safety glazed where applicable in accordance with BS 6206 : 1981 and Building Regulation 2000 Approved Document K.

Products are typically externally bead glazed employing a drained and ventilated glazing system with sealed units incorporating warm edge composite super spacers and argon gas filling as standard. Sealed units are supported on setting blocks and dry glazed with EPDM gaskets.

All commercially available high performance glass types can be specified to meet particular requirements for thermal insulation, acoustic attenuation, solar control, safety, security and fire protection where applicable.

## PERFORMANCE

All Westcoast products can be considered as genuinely high performance but frame size, glazing and other factors can, however, directly affect performance levels. Westcoast technical support staff should be consulted if particular data is required or for advice on how to achieve the most cost effective solution for specific performance targets.

## WEATHERTIGHTNESS

Products comply with the following minimum performance standards when tested in accordance with:

EN 1026 : 2000 (air permeability)  
EN 1027 : 2000 (watertightness)  
EN 12211 : 2000 (wind resistance)

Air Permeability: 600 Pa (Class 4)  
In accordance with EN 12207 : 2000

Watertightness: 900 Pa (Class E900)  
In accordance with EN 12208 : 2000

Wind Resistance: 2000 Pa (Class A5)  
In accordance with EN 12210 : 2000

Exposure Category : 2000  
In accordance with BS 6375 : Part 1 : 2009

## THERMAL INSULATION

Products can be glazed to provide whole window 'U' values ranging from 1.4Wm<sup>2</sup>K to less than 0.8Wm<sup>2</sup>K in accordance with EN ISO 10077-2 : 2012.

## ACOUSTIC ATTENUATION

Double and triple glazed products can be specified to achieve tested sound reductions in a range from 31 to 48dB(Rw) in accordance with EN ISO 10140- 2 : 2012.

## SECURED BY DESIGN

All principle products have been tested to comply with PAS 24: 2016.

## FIRE RESISTANCE

A selection of fixed and opening lights are classified EI45 and EI<sub>2</sub>45 in accordance with EN 13501- 2 : 2007 + A1 : 2009 when tested to EN1364- 1 : 1999 and EN 1634- 1 : 2014 respectively.

## TESTING

A continuous programme of internal and 3rd party independent testing ensures that Westcoast products remain at the very forefront of fenestration technology.

## INSTALLATION

Westcoast windows and doors are supplied to site fully factory finished and glazed for installation into prepared openings. A comprehensive design and installation service is offered.

## MAINTENANCE

Maintenance is limited to periodic washing of external aluminium and glass surfaces with water containing a mild detergent. Internal timber should be cleaned with a damp cloth or polished.

Ironmongery items are made from corrosion resistant materials and require only annual inspection and lubrication of appropriate moving parts.